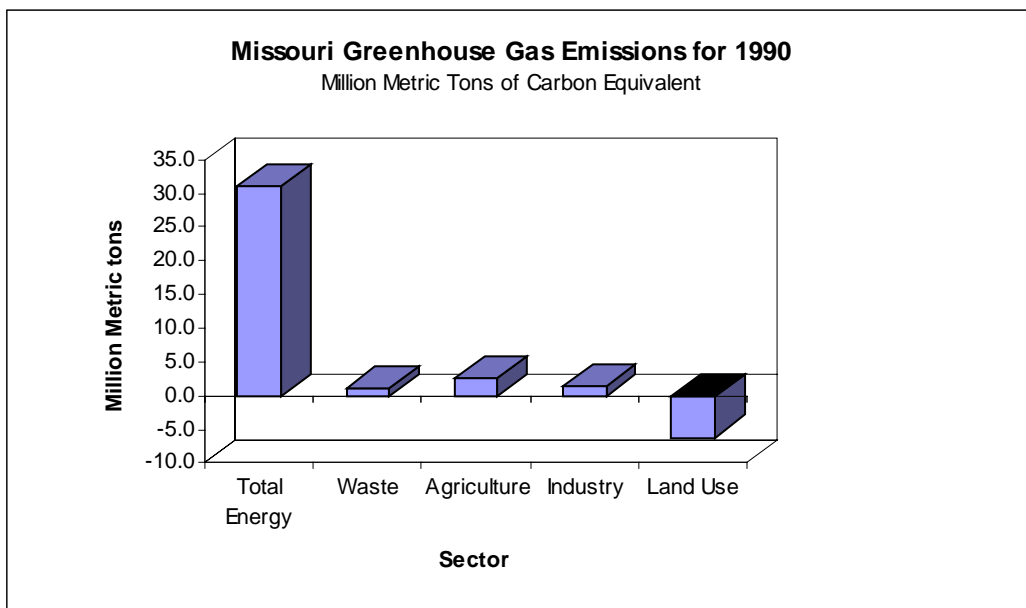


MISSOURI GREENHOUSE GAS EMISSIONS AND SINKS INVENTORY: SUMMARY



This report provides a detailed inventory of greenhouse gas emissions and sinks for Missouri in 1990. Emissions were estimated using methods from EPA's 1995 guidance document ***State Workbook: Methodologies for Estimating Greenhouse Gas Emissions***. In 1990, Missouri emitted 29.9 million metric tons of carbon equivalent (MMTCE). Missouri estimated emissions of 2.4 MMTCE biomass fuels and from sources not included in the workbook.¹ Emissions from these sources are not included in the reported total or the table below.

The principal greenhouse gases were carbon dioxide, comprising 93.8 million metric tons, and methane, with 0.6 million metric tons (3.4 MMTCE). Other emissions included 0.01 million metric tons of nitrous oxide (0.7 MMTCE) and 141.5 metric tons of perfluorocarbons (0.3 MMTCE).

The major source of carbon dioxide emissions was fossil fuel combustion (97%), with minor emissions from cement production and lime manufacture. Carbon dioxide sinks (timber stock and other forest resources) offset about 20% of the total carbon dioxide emissions. Contributors to methane emissions were domesticated animals (37%), landfills (35%), manure management (23%), and coal mining and natural gas production (3%). Nitrous oxide emissions were accounted for by nitric acid production and fertilizer use.

Missouri emissions in 1990 were 5.6 MTCE per capita, compared to 1990 U.S. emissions of 6.4 MTCE per capita.

¹ These emissions include oxidized CO, non-CO₂ emissions from highway and non-highway vehicles, CO₂ emissions from the decomposition of agricultural lime, and CO₂ and N₂O emissions from forest soil disturbances.

Missouri Greenhouse Gas Emissions for 1990

BY SECTOR	CO ₂ (MMTCE)	Methane (MMTCE)	Nitrous Oxide (MMTCE)	PFCs (MMTCE)	Total GHG Emissions (MMTCE)
Energy - Residential	2.0	*	*	*	2.0
Energy - Commercial	1.1	*	*	*	1.1
Energy - Industrial	4.0	*	*	*	4.0
Energy - Transport	10.8	*	*	*	10.8
Energy - Utility	12.8	*	*	*	12.8
Total Energy	30.8	0.1	*	*	30.9
Waste	*	1.2	*	*	1.2
Agriculture	*	2.1	0.6	*	2.7
Industry	1.0	*	0.1	0.3	1.3
Land Use	-6.2	*	*	*	-6.2
Total	25.6	3.4	0.7	0.3	29.9

All emissions are reported in million metric tons of carbon equivalent (MMTCE).

An asterisk (*) indicates that emissions of the gas from this sector were zero, insignificant, or not reported.

Emissions due to coal mining and extraction of natural gas and oil are included in the total energy figures, and emissions from biofuel combustion are excluded.